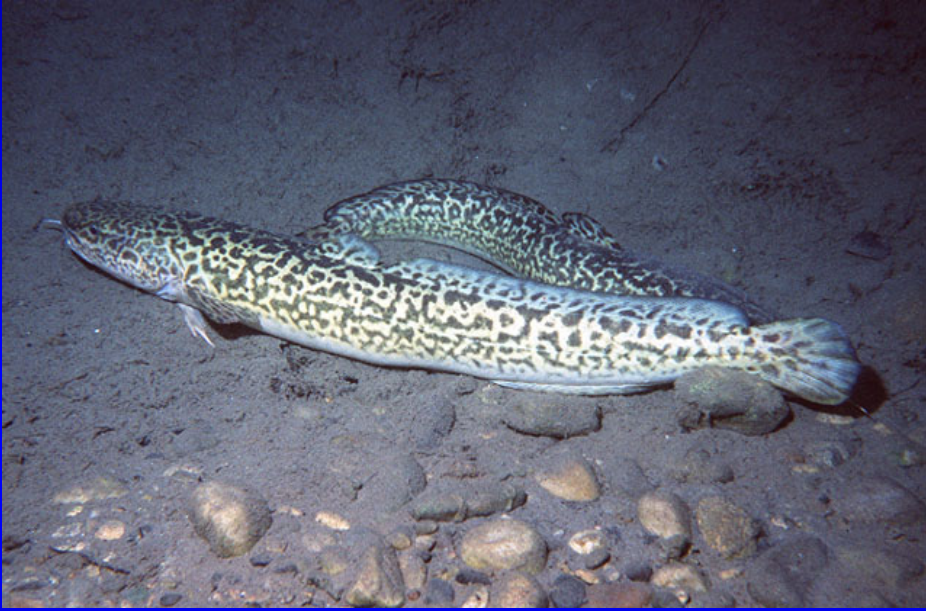
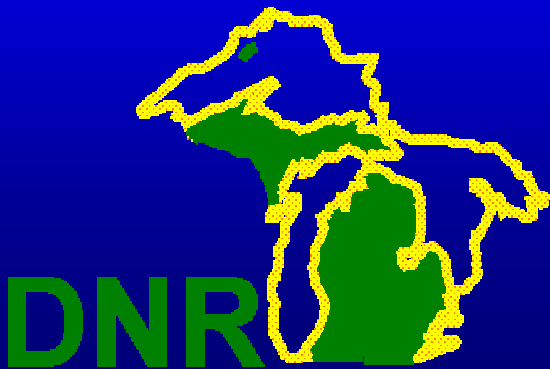


Status of Burbot in Lake Huron



Aaron Woldt
MDNR

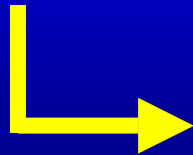


General Species Information

- Only member of the cod family that lives in freshwater.
- Circumarctic distribution in freshwater.
- Are crepuscular and largely nocturnal.
- Live in deep lakes and larger rivers with slow currents.
- Usually associated with bottom cover like large rocks, dense vegetation, and crevices.

General Species Information (cont.)

- Move into shallow water at night to feed.
- Feed on invertebrates, and mollusks when small and add fish to the diet as they get older.
- **Common names:** freshwater cod, freshwater eel, eelpout, ling, lota, lush, and lawyer.

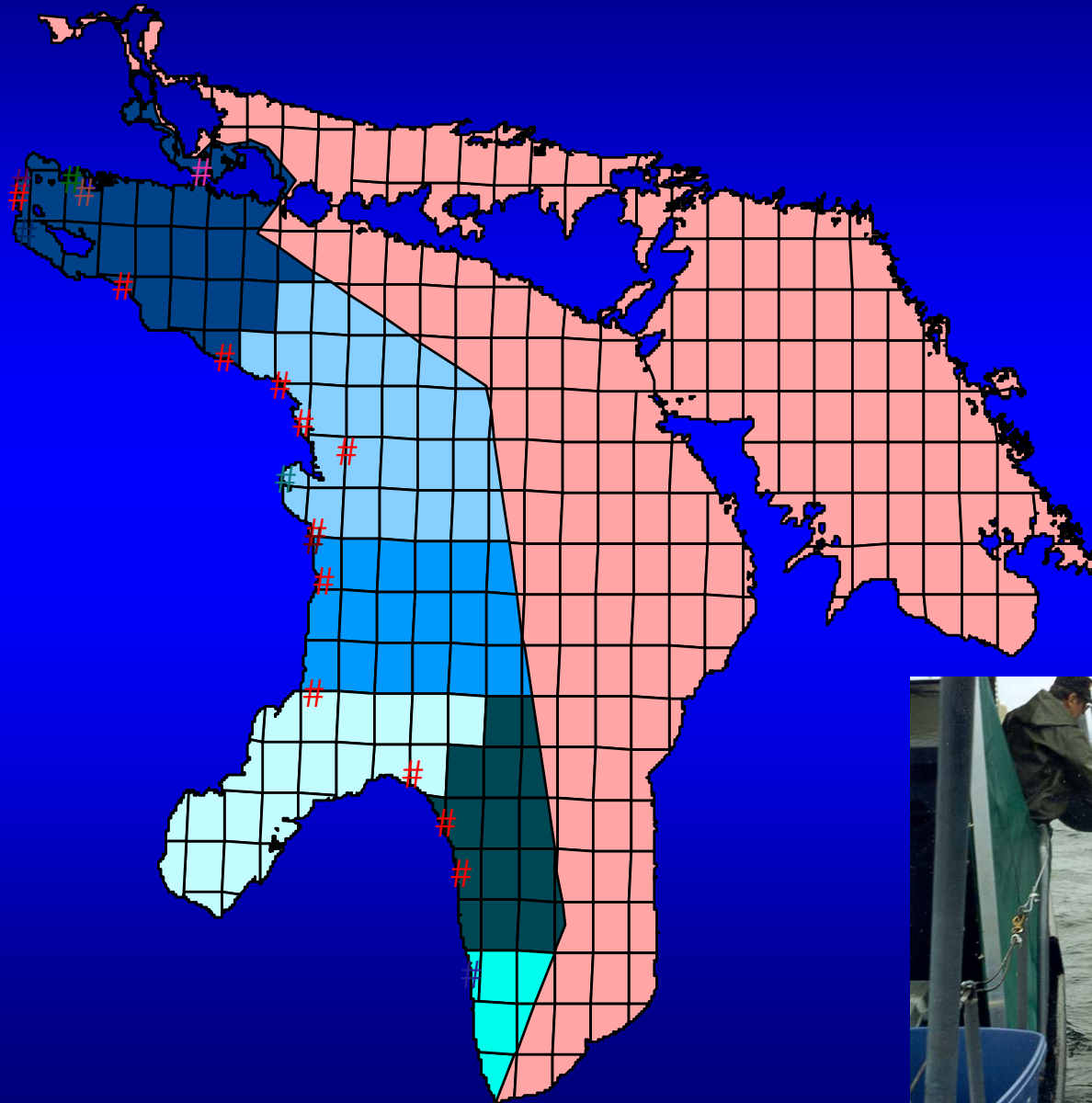


Q: What do you call 1,000 burbot at the bottom of Lake Huron?

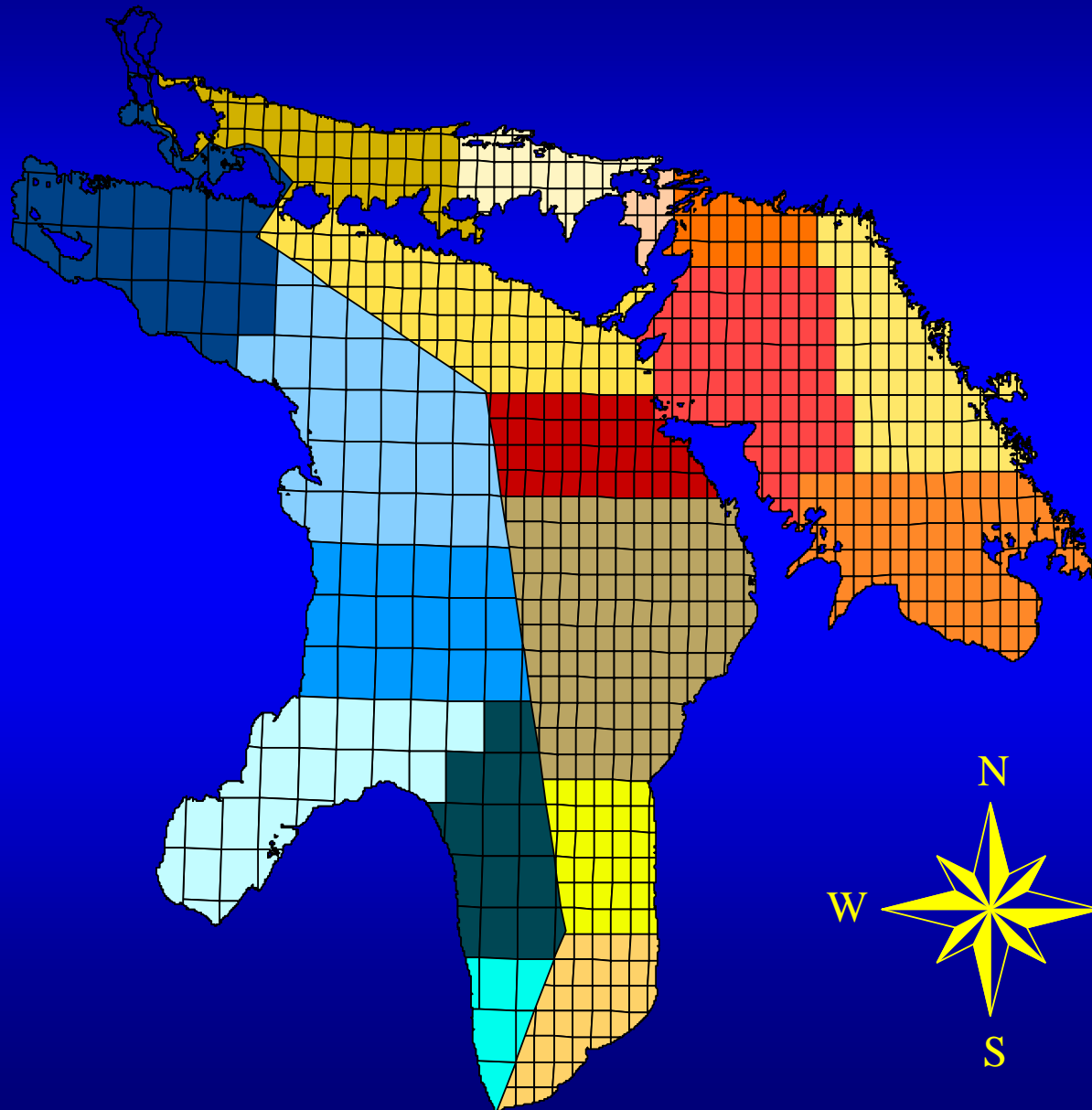
FCO from 1992 State of Lake Huron

“Recognize and protect the array of other indigenous fish species because they contribute to the richness of the fish community. These fish--cyprinids, rare ciscoes, suckers (*Catostomus spp.*), burbot (*Lota lota*), gars (*Lepisosteidus spp.*), and sculpins (*Cottidae*)--are important for three reasons. They have ecological significance; intrinsic value; and social, cultural, and economic worth.”



















Alpena lake trout survey stations



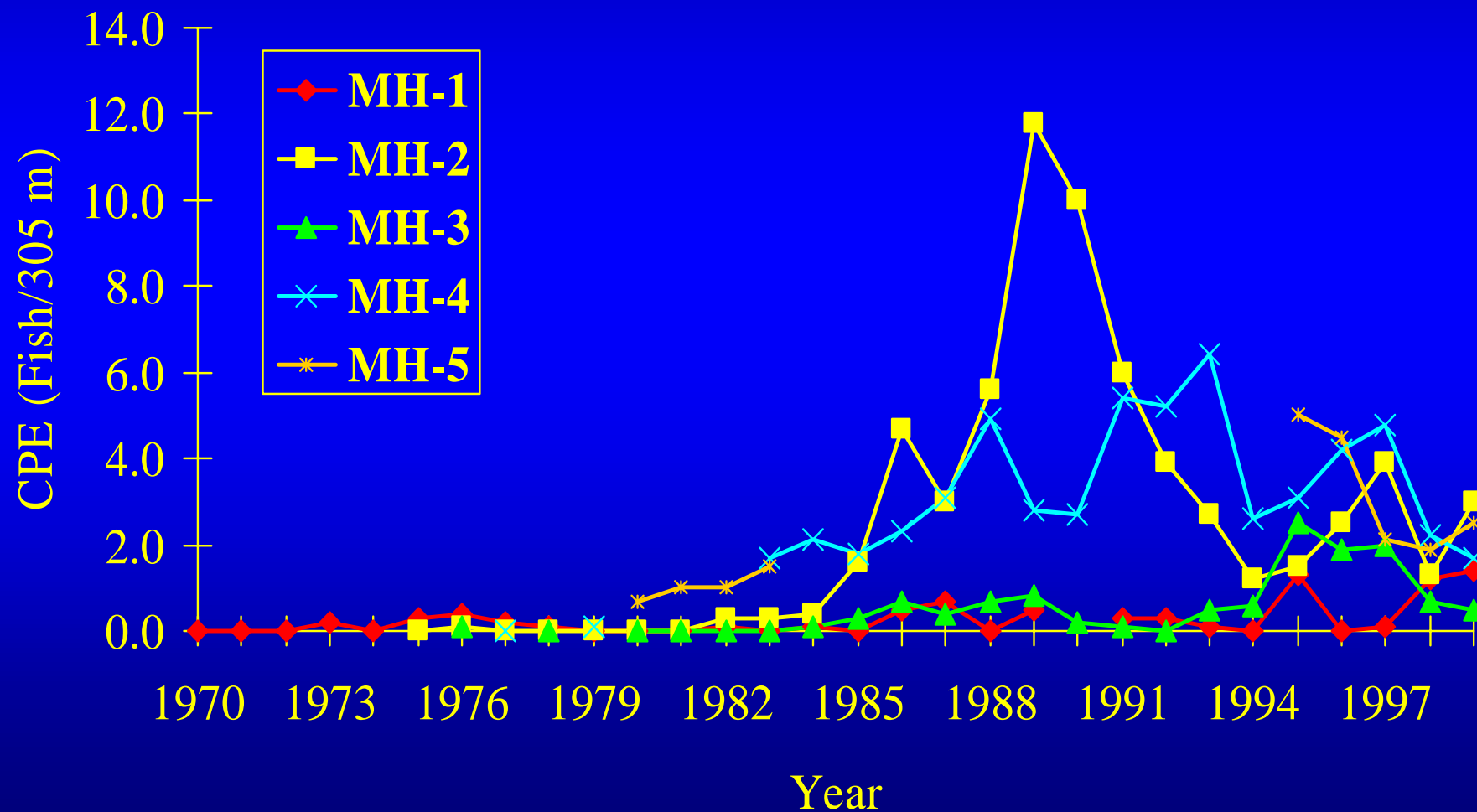
Lake Huron Statistical Districts



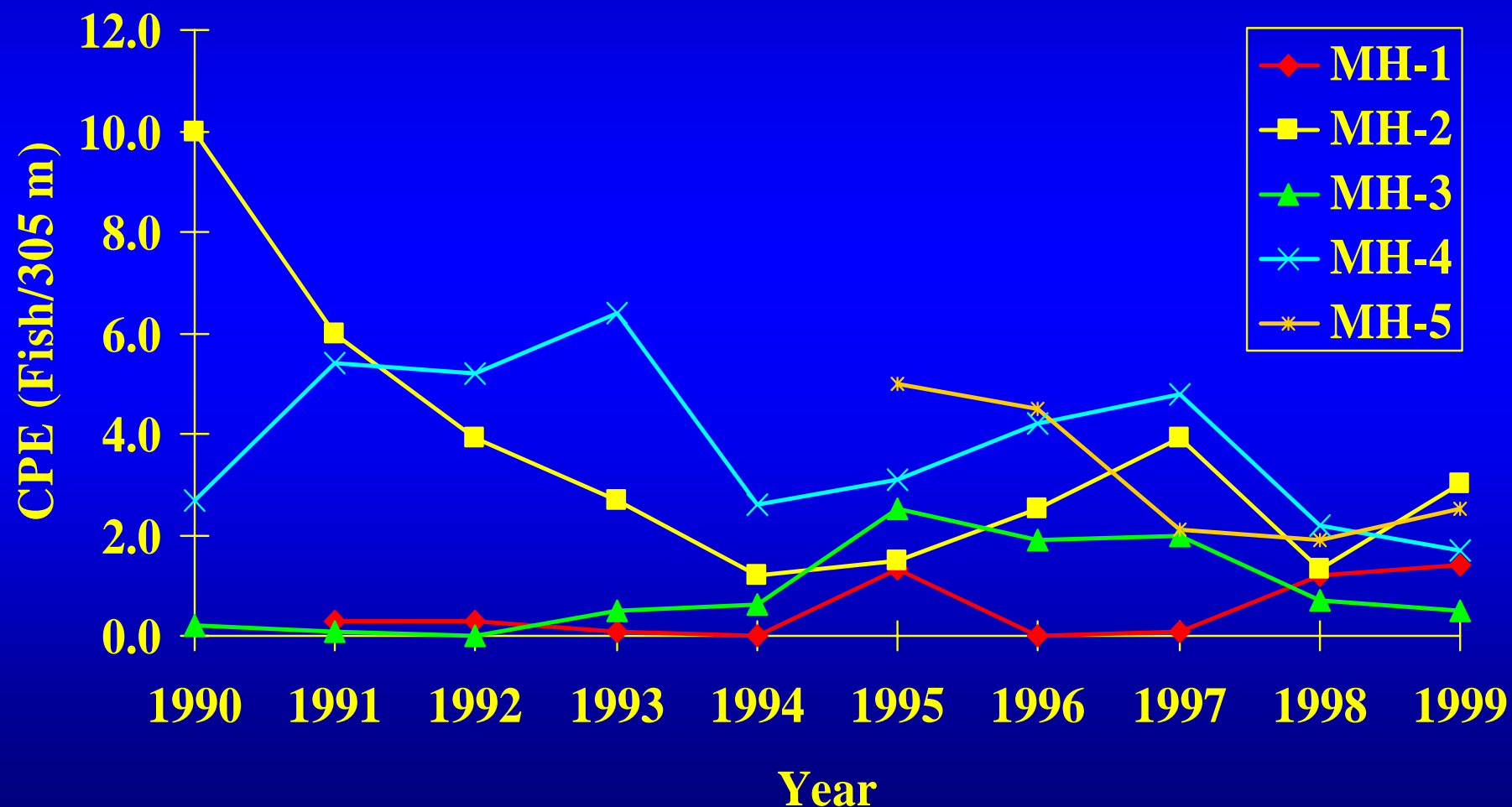
Statistical Districts

	MH-1
	MH-2
	MH-3
	MH-4
	MH-5
	MH-6
	NC-1
	NC-2
	NC-3
	OH-1
	OH-2
	OH-3
	OH-4
	OH-5
	GB-1
	GB-2
	GB-3
	GB-4

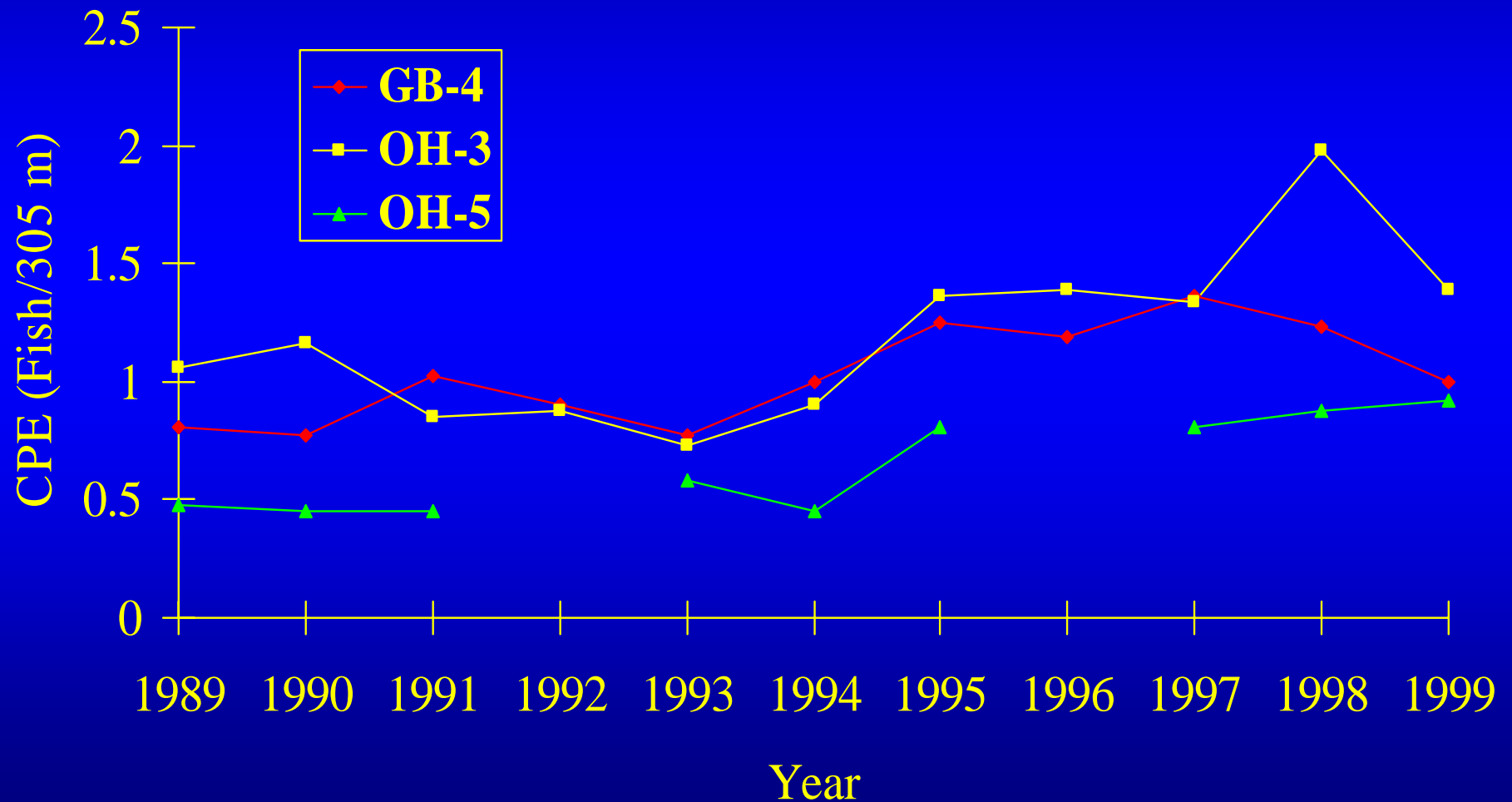
CPE of Burbot in Bottom Set Survey Nets, US Waters



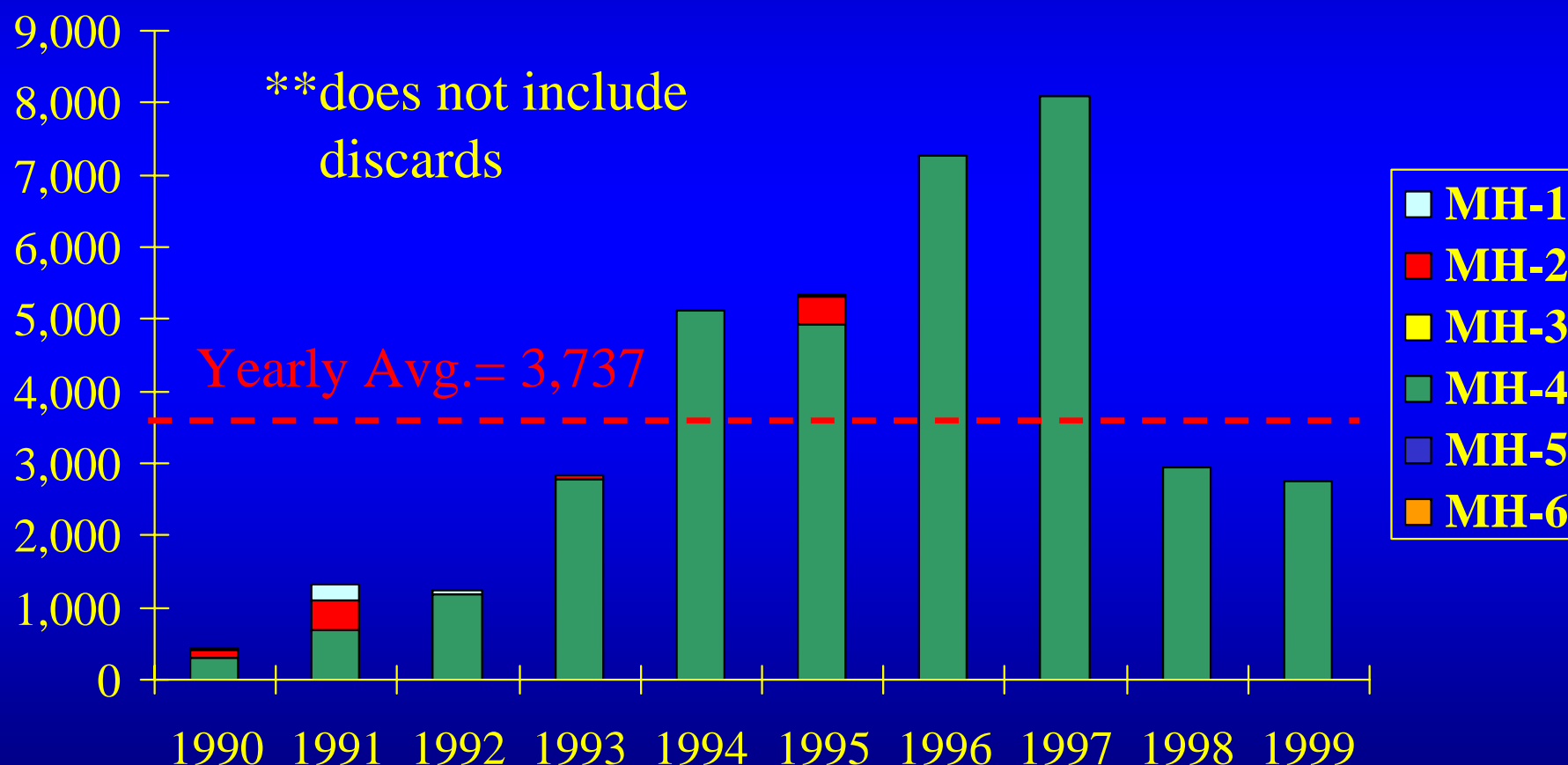
CPE of Burbot in Bottom Set Survey Nets, US Waters



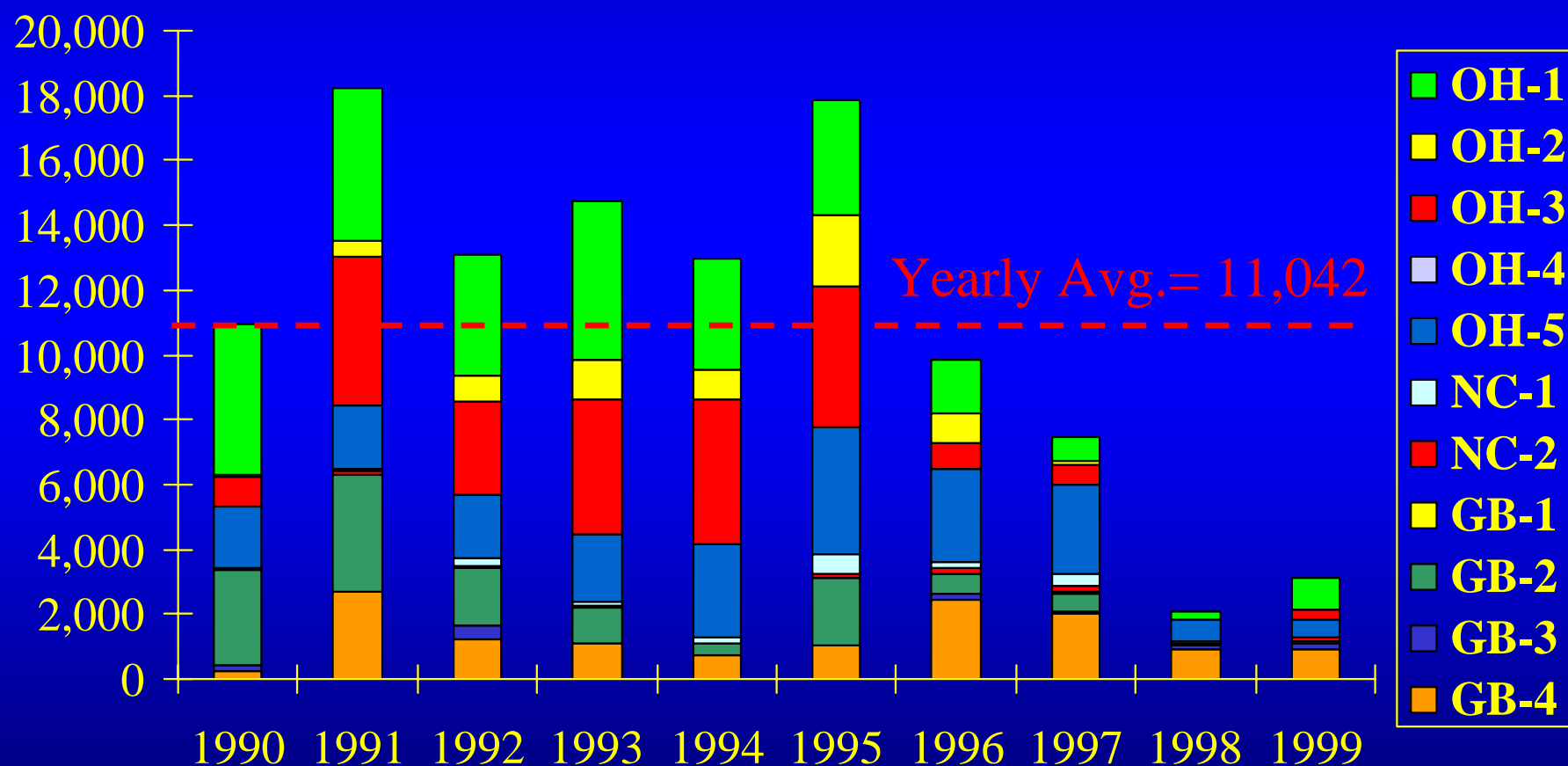
CPE of Burbot in Survey Index Netting, Canadian Waters



Total Number of Commercially Marketed Burbot, US Waters



Total Number of Commercially Caught Burbot, Canadian Waters



Diet Composition

- From 1996-2000, we examined stomach contents from 409 burbot.
- 324 (79%) contained food items and 85 (21%) were void.
- Overall, burbot averaged 3.96 prey fish / stomach.
- Those with food averaged 5.00 prey fish / stomach.

Diet Composition (cont.)

- Species found in burbot stomachs included: rainbow smelt, slimy sculpin, alewife, crayfish, nine-spine stickleback, deepwater sculpin, zebra mussels, three-spine stickleback, trout perch, johnny darter, round goby, yellow perch, spottail shiner, may flies, terrestrial insects, and unidentified fish remains.

Diet Composition (cont.)

Numerical % Composition

Smelt	36.9%
UFR	16.9%
Sculpin	10.4%
Alewife	7.2%
Crayfish	6.3%
Sticklebacks	6.3%
All other spp.	<1%

Mass % Composition

Smelt	22.2%
Alewife	21.3%
UFR	13.3%
Sculpin	12.8%
Crayfish	12.1%
Sticklebacks	6.1%
All other spp.	<1%

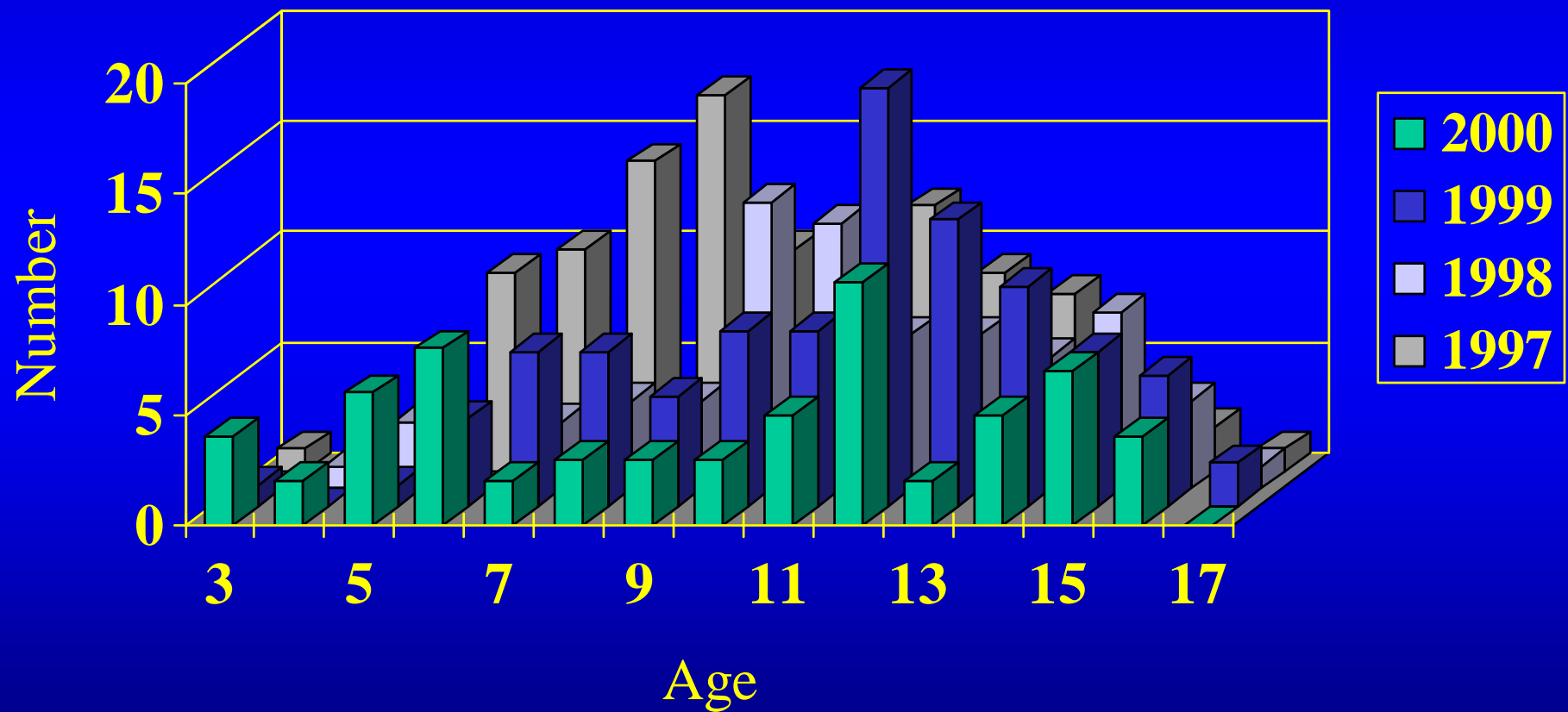
Lamprey Wounding (A1 to A3)

- We examined 471 burbot for lamprey marks from 1996 to 2000
- Sea lamprey wounding rates were low, averaging 0.8 marks / 100 fish
- There were no obvious wounding trends with size of burbot or with location in the lake

Lamprey Wounding By Size

Group	N	Marks	Marks/100
< 430 mm	29	0	0.00
430-529	126	0	0.00
530-629	181	3	1.66
630-729	112	1	0.89
>= 730	23	0	0.00

Burbot Age Distribution by Year



A photograph of two large catfish, likely channel catfish, resting on a wooden deck. The catfish on the left is facing the viewer with its mouth slightly open, showing its pinkish interior and small white teeth. The catfish on the right is positioned behind it, also facing forward. Both fish have dark, mottled patterns on their olive-brown skin. The background consists of horizontal wooden planks. The entire image is framed by a solid blue border. Two white speech bubbles with black outlines are overlaid on the image. One bubble is near the head of the left catfish, and the other is near the head of the right catfish.

WAAAAAAS
UP ?

ANY
QUESTIONS ?